

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (currently amended) A voice portal hosting system,
2 intended to be connected to a first voice telecommunication
3 network in order for a plurality of users in said network to
4 establish a connection with said system using voice equipment,
5 said system comprising:

6 a memory in which a plurality of interactive voice
7 response applications providing interactive voice
8 response functionality is stored, each of said
9 applications including an executable component for
10 execution by said hosting system;

11 a common speech recognition module;
12 means for storing a plurality of user-specific speech
13 models adapted to specific users for use by the
14 common speech recognition module;

15 a user identification module for identifying a user;
16 means for retrieving the user-specific speech model of
17 the identified user from said plurality of models;

18 and

19 uploading means for independently uploading said
20 plurality of interactive voice response
21 applications, to said system, ~~through a second~~
22 ~~telecommunication network~~ by a plurality of
23 independent value-added service providers, wherein
24 the identified user interacts with one or more of said
25 interactive voice response applications, and wherein
26 said one or more interactive voice response applications
27 utilize said retrieved user-specific speech model

28 via said common speech recognition module for
29 recognizing speech of the identified user.
30 ~~at least a plurality of said interactive voice response~~
31 ~~applications use a common speech recognition module,~~
32 ~~which includes user specific speech models, for~~
33 ~~executing on said system, and further wherein~~
34 ~~said system is adapted to execute one or more of said~~
35 ~~voice response applications when one of said users~~
36 ~~calls said system.~~

1 2. (original) The voice portal hosting system of claim 1,
2 wherein said common speech recognition module comprises a
3 common user profile database.

1 3. (original) The voice portal hosting system of claim 2,
2 wherein said common user profile database includes user
3 preferences.

1 4. (original) The voice portal hosting system of claim 3,
2 wherein said user preferences include a delivery address for
3 goods and/or services ordered with said value-added service
4 providers.

1 5. (original) The voice portal hosting system of claim 3,
2 wherein said user preferences include a billing address and/or
3 preferences for goods and services ordered with said value-
4 added service providers.

1 6. (canceled).

1 7. (original) The voice portal hosting system of claim 6,
2 comprising means for adapting said common speech models

3 associated to a user during each dialogue between said user
4 and each of said interactive voice response applications.

1 8. (original) The voice portal hosting system of claim 7,
2 wherein said means for adapting said common speech models uses
3 recorded users' speech samples for adapting said common speech
4 models off-line.

1 9. (original) The voice portal hosting system of claim 1,
2 wherein said common speech recognition module uses Hidden
3 Markov Models, and further comprising a Hidden Markov Models
4 adaptation module for adapting said models to said user.

1 10. (original) The voice portal hosting system of claim
2 9, wherein said Hidden Markov Models adaptation module allows
3 for an incremental adaptation of said models.

1 11. (original) The voice portal hosting system of claim
2 1, wherein said common speech recognition module uses user-
3 specific language models.

1 12. (original) The voice portal hosting system of claim
2 11, comprising means for adapting said common language models
3 associated to a user during each dialogue between said user
4 and each of said interactive voice response applications.

1 13. (original) The voice portal hosting system of claim
2 1, wherein said common speech recognition module uses
3 selections previously made by said users.

1 14. (previously presented) The voice portal hosting
2 system of claim 13, wherein said selections previously made by

3 said users are stored in said voice portal hosting system for
4 improving the arborescence of the menus.

1 15. (original) The voice portal hosting system of claim
2 1, wherein at least a plurality of said interactive voice
3 response applications use a common user identification module
4 run on said system.

1 16. (original) The voice portal hosting system of claim
2 15, wherein said user identification module uses an
3 identification of the equipment used by said user in said
4 first telecommunication network.

1 17. (original) The voice portal hosting system of claim
2 16, being operated by a telecom operator of said first
3 telecommunication network, wherein said user identification
4 module uses an identification of the equipment used by said
5 user in said first telecommunication network even when said
6 identification is not available for the other B-subscribers of
7 said first telecommunication network.

1 18. (original) The voice portal hosting system of claim
2 15, wherein said user identification module uses a voice-based
3 user identification module.

1 19. (original) The voice portal hosting system of claim
2 15, wherein said common speech recognition module uses a
3 speaker-dependant speech recognition algorithm, wherein said
4 speaker is identified by said common user identification
5 module.

1 20. (original) The voice portal hosting system of claim
2 1, wherein at least a plurality of said interactive voice

3 response applications use a common billing module and a common
4 clearing center for dispatching the collected amounts to said
5 value-added service providers.

1 21. (original) The voice portal hosting system of claim
2 20, wherein said common billing module allows for the billing
3 of transactions between said users and said value-added
4 service providers on a common bill prepared by the operator of
5 said voice portal hosting system.

1 22. (original) The voice portal hosting system of claim
2 20, wherein at least a plurality of said users have a deposit
3 account on said voice portal hosting system which can be used
4 for transactions with a plurality of said value-added service
5 providers.

1 23. (original) The voice portal hosting system of claim
2 1, wherein at least a plurality of said interactive voice
3 response applications use a user authentication module based
4 on an electronic signature and/or on biometric parameters of
5 said users.

1 24. (original) The voice portal hosting system of claim
2 1, wherein said second telecommunication network is a TCP/IP
3 network.

1 25. (original) The voice portal hosting system of claim
2 24, wherein at least some of said interactive voice response
3 applications are described with Voice extensible Markup
4 Language documents.

1 26. (original) The voice portal hosting system of claim
2 25, wherein a compilation module run on said system compiles
3 said interactive voice response applications.

1 27. (original) The voice portal hosting system of claim
2 1, wherein at least one free interactive voice response
3 application is made available by the operator of said system.

1 28. (original) The voice portal hosting system of claim
2 27, wherein said free interactive voice response application
3 includes a free directory assistance service.

1 29. (canceled).

1 30. (currently amended) A method for allowing each of a
2 plurality of value-added service providers to set up an
3 interactive voice response application including an executable
4 component for execution by a voice portal hosting system
5 commonly used by said plurality of value-added service
6 providers, said voice response application for being used by a
7 plurality of users, comprising the steps of:

8 storing a plurality of user-specific speech models
9 adapted to specific users for use by a common speech
10 recognition module;

11 identifying a user calling said system;

12 retrieving the user-specific speech model of the

13 identified user from said plurality of models;

14 independently uploading, to said system, said interactive
15 voice response applications which provide
16 interactive voice response functionality; ~~through a~~
17 ~~second telecommunication network in said voice~~
18 ~~portal hosting system, at least a plurality~~

19 the identified user interacting with one or more of said
20 interactive voice response applications; and
21 said one or more of said applications using [[a]] said
22 retrieved user-specific speech model via said common
23 speech recognition module for executing on said
24 hosting system and for recognizing speech of the
25 identified user. ~~utilizing common user specific~~
26 ~~speech models associated with said users; and~~
27 ~~executing one or more of said voice response applications~~
28 ~~when one of said users calls said system.~~

1 31. (original) The method of claim 30, wherein said
2 interactive voice response applications use a common user
3 profile database stored in said voice portal hosting system.

1 32. (original) The method of claim 31, wherein said
2 interactive voice response applications use user preferences
3 stored in said common user profile database.

1 33. (original) The method of claim 32, wherein said user
2 preferences include a delivery address for goods and/or
3 services ordered with said value-added service providers.

1 34. (original) The method of claim 33, wherein said user
2 preferences include a billing address and/or preferences for
3 goods and/or services ordered with said value-added service
4 providers.

1 35. (original) The method of claim 34, wherein said
2 common speech recognition module uses common users' speech
3 models.

1 36. (original) The method of claim 35, wherein said
2 common speech models associated to a user are adapted during
3 each dialogue between said users and each of said interactive
4 voice response applications.

1 37. (original) The method of claim 30, wherein said
2 common speech recognition module uses common users' language
3 models.

1 38. (original) The method of claim 37, wherein said
2 common language models associated to a user are adapted during
3 each dialogue between said user and each of said interactive
4 voice response applications.

1 39. (original) The method of claim 30, wherein at least a
2 plurality of said interactive voice response applications uses
3 a common user identification module run on said system.

1 40. (original) The method of claim 39, wherein said user
2 identification module uses an identification of the equipment
3 used by said user in said first telecommunication network.

1 41. (original) The method of claim 40, wherein said voice
2 portal hosting system is operated by a telecom operator of
3 said first telecommunication network, wherein said user
4 identification module uses an identification of the equipment
5 used by said user in said first telecommunication network even
6 when said identification is not available for the other B-
7 subscribers of said first telecommunication network.

1 42. (original) The method of claim 39, wherein said user
2 identification module uses a voice-based speaker
3 identification module.

1 43. (original) The method of claim 39, wherein said
2 common speech recognition module uses a speaker-dependant
3 speech recognition algorithm, said user being identified by
4 said common user identification module.

1 44. (original) The method of claim 30, wherein at least a
2 plurality of said interactive voice response applications use
3 a common billing module and a common clearing center for
4 dispatching the collected amounts to said value-added service
5 providers.

1 45. (original) The method of claim 44, wherein said
2 common billing module allows for the billing of transactions
3 between said users and said value-added service providers on a
4 common bill prepared by the operator of said voice portal
5 hosting system.

1 46. (original) The method of claim 44, wherein at least a
2 plurality of said users have a deposit account on said system
3 which can be used for transactions with a plurality of said
4 value-added service providers.

1 47. (original) The method of claim 30, wherein at least a
2 plurality of said interactive voice response applications use
3 a user authentication module based on an electronic signature
4 and/or on biometric parameters of said users.

1 48. (original) The method of claim 30, wherein at least
2 some of said interactive voice response applications are
3 described with Voice extensible Markup Language documents.

1 49. (original) The method of claim 48, wherein a
2 compilation module run on said voice portal hosting system
3 compiles said interactive voice response applications.

1 50. (currently amended) ~~Method~~ A method for allowing each
2 of a plurality of independent value-added service providers to
3 set up an interactive voice response applications each
4 including an executable component for execution by a voice
5 portal hosting system commonly used by said plurality of
6 value-added service providers and which can be used by a
7 plurality of users, said method comprising the steps of:

8 independently uploading, through a second
9 telecommunication network, said interactive voice
10 response applications to said system for providing
11 ~~which provide~~ interactive voice response
12 ~~functionality through a second telecommunication~~
13 ~~network to said voice portal hosting system,~~
14 storing a plurality of user-specific speech models
15 adapted to specific users for use by a common speech
16 recognition module,
17 identifying a user calling said system,
18 retrieving the user-specific speech model of the
19 identified user from said plurality of models,
20 and
21 executing one or more of said voice response applications
22 in response to the user calling said system, said
23 executing including interacting with said user via
24 said common speech module using said retrieved user-

25 specific speech model for recognizing the speech of
26 the user, wherein
27 ~~when one of said users calls said system; wherein~~
28 ~~at least a plurality of said applications use a common~~
29 ~~speech recognition module for executing by said~~
30 ~~voice portal hosting system, and wherein~~
31 ~~said common speech recognition module uses common user~~
32 ~~specific speech models, and wherein~~
33 said common speech models are associated to a user and
34 are adapted during each dialogue between said users
35 and any of said interactive voice response
36 applications.

1 51. (original) Computer program product directly loadable
2 into the internal memory of a digital computer, comprising
3 software code portions for performing the steps of one of the
4 claims 30 to 50 when said product is run on a server connected
5 to a first telecommunication network.

1 52. (new) A voice portal hosting system allowing a
2 plurality of users to establish a connection with said system
3 using voice equipment for interacting with one or more of a
4 plurality of service providers, said system comprising:
5 means for independently uploading a plurality of
6 interactive voice response applications from said
7 service provides, to said system, via a
8 communication channel, each of said voice response
9 applications for providing interactive voice
10 response functionality for a corresponding one of
11 said service providers when executed by said hosting
12 system;
13 means for storing said plurality of interactive voice
14 response applications;

15 a common speech recognition module;
16 means for storing a plurality of user-specific speech
17 models adapted to specific users for use by the
18 common speech recognition module;
19 a user identification module for identifying a user
20 calling said system via another communication
21 channel;
22 means for retrieving the user-specific speech model of
23 the identified user from said plurality of models,
24 wherein
25 the identified user interacts with one or more of said
26 interactive voice response applications, and wherein
27 said one or more interactive voice response applications
28 utilize said retrieved user-specific speech model
29 via said common speech recognition module for
30 recognizing speech of the identified user, and
31 further wherein
32 said common speech models are adaptable during dialogue
33 between said users and any of said interactive voice
34 response applications.